Du Châtelet

Sample Syllabus, suitable for 500-level graduate course with 8-12 participants

Professor Information: Email Address: <u>Qiu.Lin@Duke.edu</u> Office Hours: Wed 3-5pm Office Location: West Duke Rm 650

Class Information: Class Time: Mon and Wed 1-2:15pm Class Location: West Duke 202

Course Description: This is a discussion- and research-intensive course aimed at enabling participants to gain competence in Du Châtelet's scholarship. We will focus on Du Châtelet's *magnum opus, Foundations of Physics* (1740 & 1742), investigating her responses to the philosophical challenges posed by the fast-growing field of physics during her lifetime. We will start with a historical introduction to Du Châtelet's milieu, coupled with an overview of the current state of the literature. We will then engage critically and constructively with her work, and with key issues lying at the heart of 18th century philosophy of physics: hypothesis, method, action-at-a-distance, gravity, space and time, and motion. If time permits, we will also introduce Du Châtelet's physical monadology. Since the work of Descartes, Newton, and Leibniz provides important background to Du Châtelet's *Foundations* remains uncharted territory, I expect each participant to work closely with the rest of the class and develop an independent project based on the course materials. Texts will be read in English, but a reading knowledge of French will be a significant advantage (the later edition of *Foundations* has yet to be translated into English).

Learning Goals:

- Participants will gain familiarity with Du Châtelet's milieu and major view, as well as the secondary literature surrounding them.
- Participants will engage critically and constructively with the primary texts, develop research questions, and carry out the research needed to develop an independent project.
- Participants will offer constructive feedback on others' presentations and written work, supporting each other and making progress as a group.

Course Requirements:

• **Participation (20%)**: your participation in class discussion will be judged on 1) grasp of and depth of reflection on the assigned reading material and 2) ability to listen and respond

relevantly to the comments of other students in the course. Consistent and constructive participation will weigh in favor of the better grade in case you end up on the borderline of two final course grades based on your other work.

- **Paper Proposal (5%):** You will be asked to submit an one-page proposal five sessions into the course to state (1) a topic of interest, (2) how it contributes to the current state of literature, and (3) what is the research needed to turn the ideas into a full-length paper. The word limit for this document is 500 words.
- Writing (35%): You are required to write one research paper for this course. Since Du Châtelet is a figure with tremendous research potential, I highly recommend every participant to identify a topic of interest, and develop an independent project from it. The paper should not exceed 6,000 words (double spaced, 12 point, PDF format). I will offer some prompts upon request, but participants are encouraged to this opportunity to attempt something original and worthy of their investment. Please discuss with me which topics seem to align most closely with your interests and strengths before starting to write.
- **Presentations and commentary (15% x 2+10%)**: Each participant is required to present on an assigned reading, her/his own research project, and serve as the commentator for another participant's project presentation. The 20 minutes of each session is devoted to presentation, which should serve as a guide for the rest of class with 2-3 key issues involved in the reading and some accompanying observations about them. Project presentation and commentary will take the format of conference talks: 20 minutes for the speaker, 5 minutes for commentary, and 5 minutes for Q&A.

Texts:

- Du Châtelet, Emilie: *Foundations of Physics* (English translation by the Notre Dame Du Châtelet group available at <u>https://www.kbrading.org/translations</u>; many thanks to them for generously sharing it with all!)
- Brading, Katherine: *Émilie Du Châtelet and the foundations of physical science*. Routledge, 2019 (hereafter as "KB").

All other texts will be made available via Sakai. The schedule below is subject to change. In the event of changes, I will send an email class-wide and update the syllabus on Sakai.

Reading Schedule

Class 1	Introduction to the course: Why Du Châtelet?
Class 2	What is Du Châtelet's Project? Primary text: Du Châtelet: "Preface" Secondary literature: KB: "Introduction"(pp. 1-25) Janik, Linda Gardiner: "Mme du Châtelet and Leibnizianism: The genesis of the Institutions de physique"
Class 3	Du Châtelet's method: a viable alternative? Primary text: Du Châtelet: "Of the Principles of Our Knowledge" KB: "Method" (pp. 26-53)
Class 4	<i>"Hypotheses non fingo"</i> : what does Du Châtelet think? Primary text Du Châtelet: "Of Hypothesis" Secondary Literature Detlefsen: "Du Châtelet and Descartes on the Roles of Hypothesis and Metaphysics in Natural Philosophy"
Class 5	*Paper proposal due Battling over action-at-a-distance: what to make of attraction? Primary text Du Châtelet: "Of Newtonian Attraction" Secondary literature KB: 4.3 "Mechanism and Method"-4.4 "Gravitation" (pp. 87-95) Janiak: "Émilie Du Châtelet: Physics, Metaphysics and the Case of Gravity"
Class 6	Is space absolute? and what does it even mean? Primary Text Newton: Scholium on Time, Space, Place, and Motion I-III (available at <u>https://plato.stanford.edu/entries/newton-stm/scholium.html</u>) Leibniz & Clarke: selections from <i>Leibniz-Clarke Correspondence</i>
Class 7	Having her cake and eating it too?: the case of space Primary text Du Châtelet: "Of Space" Secondary literature Lin: "Du Châtelet on the Representation of Space"
Class 8	Absolute motion: where it all begins Primary text Newton: Scholium on Time, Space, Place, and Motion IV-XIV (available at https://plato.stanford.edu/entries/newton-stm/scholium.html

	Secondary literature) Secondary literature Rynasiewicz:"By their properties, causes and effects: Newton's scholium on time, space, place and motion—I. The text."
Class 9	Defining absolute motion relationally?: an episode of seeming confusion Primary text Du Châtelet: "Of Motion and Rest in General" Secondary literature Brading & Lin: "Du Châtelet on Relative and Absolute Motion"
Class 10	Du Châtelet's "Physical" Monadology Primary text: Du Châtelet: "Of the Elements of Matter" Secondary literature Marius Stan: "Emilie Du Châtelet's Metaphysics of Substance"
Class 11	Spillover from previous sessions
Class 12	Project presentations: 5-6, 30 minutes each
Class 13	Project presentations: 5-6, 30 minutes each